



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/810,189

03/26/2004

Mark Grayson

062891.1216

8023

5073

7590

05/08/2006

BAKER BOTTS L.L.P.

2001 ROSS AVENUE

SUITE 600

DALLAS, TX 75201-2980

EXAMINER

LY, ANH VU H

ART UNIT

PAPER NUMBER

2616

DATE MAILED: 05/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/810,189

Applicant(s)

GRAYSON ET AL.

Examiner

Anh-Vu H. Ly

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☒ Claim(s) 1-44 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 13, 2006 has been entered.

Claim Objections

2. Claims 1-44 are objected to because of the following informalities:

With respect to claim 1, in lines 1 and 4, the limitation “for providing” or “operable to” is not a positive limitation but only requires the ability to so perform. Therefore, it does not limit a claim to a particular structure and does not limit the scope of a claim or claim limitation.

With respect to claim 3, in lines 2-3, the limitation “operable to” is not a positive limitation but only requires the ability to so perform. Therefore, it does not limit a claim to a particular structure and does not limit the scope of a claim or claim limitation.

With respect to claim 6, in lines 1, 2, 4 and 5, the limitation “for providing” or “operable to” is not a positive limitation but only requires the ability to so perform. Therefore, it does not limit a claim to a particular structure and does not limit the scope of a claim or claim limitation.

With respect to claim 28, in lines 1, 4, and 6, the limitation “for providing”, “operable to”, or “for creating” is not a positive limitation but only requires the ability to so perform. Therefore, it does not limit a claim to a particular structure and does not limit the scope of a claim or claim limitation. Further, in lines 6 and 9, “an enabler device” and “enabler mobiles”

Art Unit: 2616

are recited. The limitations as recited in the claim should be consistent. Therefore, the enabler device should be modified as the enabler mobile or vice versa.

With respect to claim 38, in line 1, "the logic embodied in a medium" is unclear. It is unclear of what medium being referred to, e.g., computer readable medium, etc... Further, as recited in lines 1, 2, 5, and 7, the limitation "for providing", "operable to", or "for creating" is not a positive limitation but only requires the ability to so perform. Therefore, it does not limit a claim to a particular structure and does not limit the scope of a claim or claim limitation.

Other pending claims are objected to for similar reasons as stated above or as they depend upon objected independent claims. Therefore, applicant is requested to review all pending claims and make any necessary corrections, e.g., replacing "for providing" with --to provide-- and replacing "operable to" with --to operate-- or replacing "for creating" with --to create--.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2616

3. Claims 1-4, 6-9, 11-14, and 16-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toth et al (US Pub 2005/0053068 A1) in view of Maes (US Pub 2004/0266388 A1). Hereinafter, referred to as Toth and Maes.

With respect to claims 1, 6, 11, 28, 33, 38, 43, and 44, Toth discloses a method for providing a multicast service (Fig. 1), comprising:

maintaining multicast service information at an application server (Fig. 1, GGSN1 which including memory and processors for storing and processing), the multicast service information describing a multicast service having an associated subscriber (Fig. 1, MCS multicasting data to M1-M10), the multicast service operable to deliver multicast content from a multicast source (page 3, 50th paragraph – a multicast source (MCS) is coupled to the GGSN and delivers for instance various multicast services such as streaming video and audio);

determining a cell supporting a user device associated with the subscriber (Fig. 1, M1-M3 coupled to RAN1);

initiating creating of a bearer path for the multicast service (page 4, 81st paragraph – SGSN informs the RAN that mobile station is joining the multicast group, so that the proper radio access bearer can be set up for the given multicast session); and

directing an enabler mobile to facilitate delivery of the multicast content to the user device using the bearer path, the enabler mobile located in the cell (Fig. 3, RAN forwards multicast data to the MS, RAN is located within a cell).

Toth does not disclose that the enabler mobile is distinct from a base station. Maes discloses a virtual mobile service provider 100 (Fig. 2) having a plurality of enabler devices 302 and 304 (Fig. 3) for facilitating delivery of multicast content from a plurality of content provider

Art Unit: 2616

108, 110, and 112 (Fig. 2) to a plurality of user devices 208, 210, and 212 (Fig. 2). It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the virtual mobile service provider in Toth's system, as suggested by Maes, to deliver content to a plurality of user devices according to different formats thereby providing and allowing a virtual aggregation of mobile enablers, supporting functions, drivers and signaling that can be performed across different access networks.

With respect to claims 2, 7, 12, and 44, Toth discloses determining an enabler mobile corresponding to the cell supporting the user device; and instructing the enabler mobile to initiate creation of a radio access bearer (page 4, 81st paragraph – SGSN informs the RAN that mobile station is joining the multicast group, so that the proper radio access bearer can be set up for the given multicast session. Herein, RAN is already determined as the RAN serving the mobile station).

With respect to claims 3, 8, 13, 30, 35, 40, and 44, Toth discloses communicating one or more parameters associated with the bearer path to the user device, the user device operable to use the parameters to receive the multicast content (page 4, 87th paragraph – SGSN notifies the mobile station of the radio access bearer and quality of service defined for the multicast session).

With respect to claims 4, 9, 14, 31, 36, and 41, Toth discloses establishing a multicast service level of the multicast service in accordance with the cell supporting the user device (page

Art Unit: 2616

4, 78th paragraph – GGSN decide the quality of service to use for the distribution of the multicast group based on information from the source, operator settings and/or the mobile terminal).

With respect to claims 16, 18, and 20, Toth discloses a method for providing a multicast service, comprising:

receiving at an enabler device an instruction to create a radio access bearer for a multicast service and creating radio access bearer for the multicast service in response to the instruction (page 4, 81st paragraph – SGSN informs the RAN that mobile station is joining the multicast group, so that the proper radio access bearer can be set up for the given multicast session), the multicast service operable to deliver multicast content from a multicast source (page 3, 50th paragraph – a multicast source (MCS) is coupled to the GGSN and delivers for instance various multicast services such as streaming video and audio), the enabler device assigned to a cell supporting a user device (Fig. 1, M1-M3 coupled to RAN1);

opening a PDP context for the radio access bearer (page 4, 79th paragraph- GGSN sends a multicast context activation message to the SGSN); and

directing an enabler device to facilitate delivery of the multicast content to the user device using the bearer path, the enabler mobile located in the cell (Fig. 3, RAN forwards multicast data to the MS, RAN is located within a cell).

With respect to claims 17, 19, and 21, Toth discloses communicating one or more parameters associated with the radio access bearer to an application server (page 4, 76th

Art Unit: 2616

paragraph – mobile terminal issues a membership report message which may contain information about the desired quality of service).

With respect to claims 22, 24, and 26, Toth discloses a method for providing a multicast service, comprising:

receiving and activating at a multicast gateway support node a PDP context for a multicast service (page 4, 79th – GGSN sends a multicast context activation message to the SGSN), the multicast service facilitated by a plurality of enabler mobiles located in one or more cells (Fig. 1, RAN1-RAN3), the plurality of enabler mobiles operable to deliver multicast content from a multicast source (page 3, 50th paragraph – a multicast source (MCS) is coupled to the GGSN and delivers for instance various multicast services such as streaming video and audio);

receiving an instruction to join a multicast tree for the multicast service and joining the multicast tree in response to the instruction (page 4, 86th paragraph – SGSN replies to the GGSN, whereby the SGSN, which including at least one processor, if not already a part, becomes a part of the multicast tree).

With respect to claims 23, 25, 27, 32, 37, 42, and 44, Toth discloses receiving the multicast content communicated using a plurality of data packets (Fig. 1, SGSN1 and SGSN 2 receiving GTP7 and GTP8); and duplicating the data packets to create duplicated data packets for each enabler mobile of the plurality of enabler mobiles (Fig. 1, SGSN duplicates GTP7 for RAN 1 and RAN3).

With respect to claims 29, 34, 39, and 44, Toth discloses activating at a multicast gateway support node a PDP context for the multicast service (page 4, 79th – GGSN sends a multicast context activation message to the SGSN); and joining the multicast gateway support node to a multicast tree for the multicast service (page 4, 86th paragraph – SGSN replies to the GGSN, whereby the SGSN, which including at least one processor, if not already a part, becomes a part of the multicast tree).

4. Claims 5, 10, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toth et al (US Pub 2005/0053068 A1) and Maes (US Pub 2004/0266388 A1) in view of Rodriguez Gil, R. et al (WO 03/039024 A2). Hereinafter, referred to as Toth, Maes, and Rodriguez Gil.

With respect to claims 5, 10, and 15, Toth and Maes have addressed all limitations as recited in independent claims 1, 6, and 11. Toth does not disclose determining a signal power; calculating power control information from the signal power; and initiating adjustment of the signal power according to the power control information. Rodriguez Gil discloses determining a signal power; calculating power control information from the signal power; and initiating adjustment of the signal power according to the power control information (Fig. 3, quality level is determined whether greater than level max or lesser than level min, if yes, then, power out is adjusted). It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the feature of adjusting the power level in Toth's system, as suggested by Rodriguez Gil, to increase quality of service.

Response to Arguments

5. Applicant's arguments with respect to claims 1-44 have been considered but are moot in view of the new ground(s) of rejection.


Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh-Vu H. Ly whose telephone number is 571-272-3175. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

avl


CHI PHAM
SUPERVISORY PATENT EXAMINER
ELECTRONIC BUSINESS CENTER
5/4/06